

Worldwide Sales by U.S. Multinational Companies

THIS article presents data on worldwide sales in 1966 and 1970 by a sample of 298 large U.S. multinational companies (MNCs) that responded to a special survey taken by the Bureau of Economic Analysis (BEA). These 298 MNCs consist of 298 U.S. reporters (the U.S. parents of the MNCs) and their 5,237 majority-owned foreign affiliates (MOFAs).

Gross worldwide sales of a MNC, as reported to BEA, consist of (i) sales by the U.S. reporter to all foreign residents, whether affiliated or not, and to unaffiliated U.S. residents; plus (ii) sales by its MOFAs to all foreign and U.S. residents, whether affiliated or not. From these gross sales data, this article derives, for the first time, MNC consolidated worldwide sales, defined as comprising for each MNC (i) sales by the U.S. reporter to unaffiliated U.S. and foreign residents; plus (ii) sales by its MOFAs to unaffiliated U.S. residents and to unaffiliated foreign residents other than sales to minority-owned foreign affiliates of the MNC.¹ Total gross and total consolidated sales are the sums of the gross and consolidated sales, respectively, of each of the 298 MNCs in the sample.

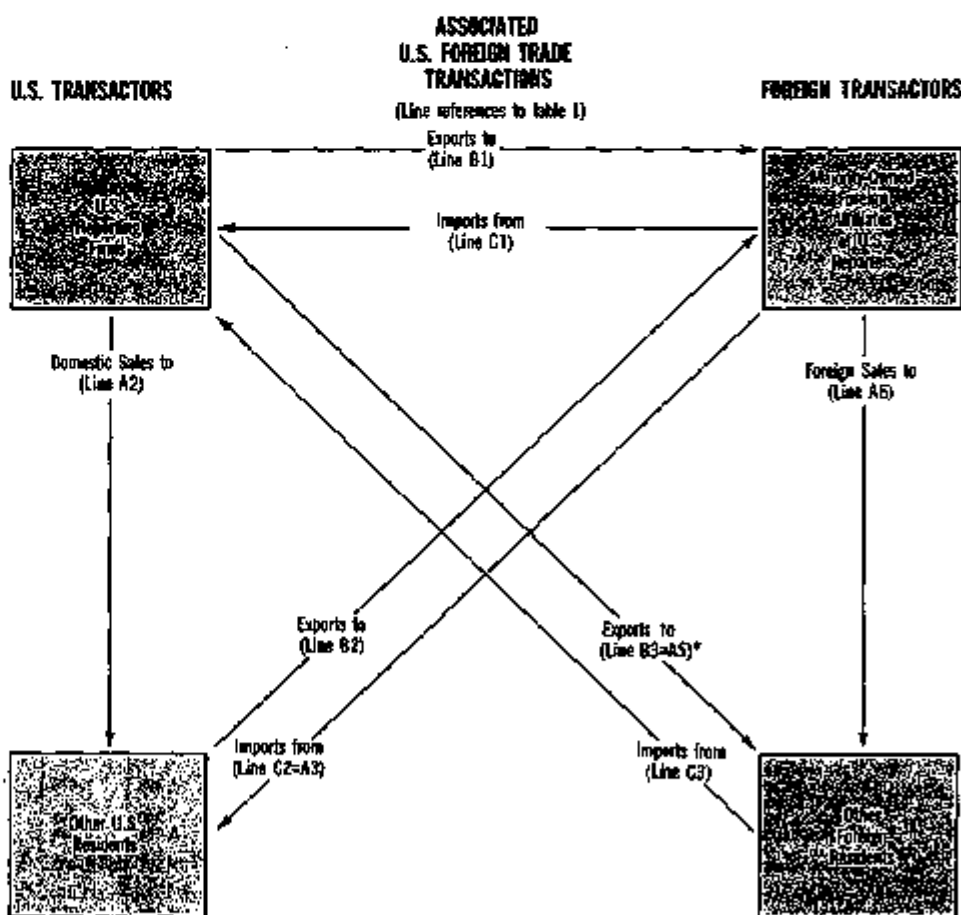
A main reason for consolidation is to eliminate duplication in the sales data of the value of goods sold by each MNC. Goods sold by one company in a MNC to a second company in the same MNC, in principle, are reflected eventually

in sales by the second company to unaffiliated (outside) customers. In gross sales, the value of the goods in sales between different parts of a MNC are counted more than once; in con-

solidated sales, goods are counted only once for each MNC. However, this consolidation does not eliminate all duplication in the sales data for the 298 MNCs as a whole. Sales by one

CHART 20

**Flow Diagram for Components of Worldwide Consolidated Sales
By U.S. MNCs and Other Associated U.S. Exports and Imports**



NOTE -- Consolidated U.S. MNC sales to unaffiliated customers. (Worldwide consolidated MNC sales = lines A2 + A3 + A4 + A5.)
U.S. foreign trade flows associated with but not an explicit part of consolidated sales.
*Line A5 differs slightly from line B3. See note 2 to table 1.

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73-1-28

MNC to another MNC in the sample are considered sales to an unaffiliated U.S. or foreign resident.

The first part of this article presents data on consolidated sales by the U.S. reporters and their MOFAs for 1966 and 1970; these data show worldwide MNC sales, split into MNC sales in U.S. markets and MNC sales in foreign markets. These data then are used, in combination with data on U.S. exports and imports associated with the MNCs,² to estimate the U.S. export content in consolidated MNC sales to unaffiliated foreigners, and the U.S. import content in consolidated MNC sales to unaffiliated U.S. residents. The trade content of sales is given both in terms of its absolute magnitude and as a percentage share of sales. The magnitude of consolidated MNC sales and the U.S. percentage trade content in

MNC sales for 1966 and 1970 are discussed, and some major factors influencing the changes in these data over the 1966-70 period are noted. The second part of this article, dealing with gross MNC sales, focuses briefly on gross sales by the foreign affiliates, the basis on which sales data were previously published by BEA (*SURVEY OF CURRENT BUSINESS*, October 1970).

The primary purpose of this article is to present in an organized framework new facts about MNC consolidated worldwide sales, and the U.S. export and import content in these sales. This article is not addressed to the fundamental question of whether or how production and sales by companies in the United States and the overall U.S. foreign trade position were influenced by the U.S. direct investments abroad. Rather, the data only show the magnitude of sales by the 298 MNCs and the U.S. foreign trade content in these sales, given the existence of U.S. direct investments abroad, as well as the other factors influencing the sales and the overall foreign trade position of the United States. By themselves, these

data cannot demonstrate whether U.S. direct investments abroad created new markets abroad for goods produced in the United States, expanded production abroad at the expense of increased U.S. production, or was, on balance, roughly neutral between encouraging production in the United States or production abroad. Identification of the magnitudes involved in MNC sales and trade is only the first step in that determination.

The data on MNC trade and sales given in this article were drawn from a publication recently released by the Bureau of Economic Analysis, entitled *Special Survey of U.S. Multinational Companies, 1970*.³ The data for sales by the MNCs generally cover both goods and services, although the service component probably is relatively small; however, some of the trade data include only goods. This and the other statistical problems encountered in constructing the data for this article are discussed in the Technical Notes.

² Available from the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161. Price \$5. Quote Accession number COM-72-11282 when ordering.

Table 1.—Consolidated Sales and Foreign Trade Transactions by 298 Multinational Companies, for 1966 and 1970, by Industry of U.S. Reporter

(Millions of dollars)

Item ¹ (line references to table 3)	All industries			Manufacturing			Petroleum			Other industries		
	1966	1970	Change, 1966-70	1966	1970	Change, 1966-70	1966	1970	Change, 1966-70	1966	1970	Change, 1966-70
A. Consolidated sales.....	284,678	369,641	101,966	192,288	262,379	68,091	51,649	76,148	24,494	42,741	68,119	17,378
1 To unaffiliated U.S. residents.....	234,642	299,511	65,869	154,454	192,480	38,026	34,312	46,985	12,674	35,178	51,086	14,912
2 By U.S. reporter (line 2).....	234,120	299,332	65,212	154,029	191,844	37,815	34,015	46,542	12,527	35,077	50,837	14,760
3 By majority-owned foreign affiliates (line 20).....	822	1,279	457	425	635	210	296	399	97	101	225	154
4 To unaffiliated foreigners.....	61,733	98,130	36,397	37,884	50,890	12,906	17,388	29,208	11,820	6,563	9,080	2,487
5 By U.S. reporter, to other than own majority-owned foreign affiliates (line 6) ²	7,681	11,286	3,705	5,767	9,080	3,313	421	685	174	1,495	1,738	285
6 By majority-owned foreign affiliates (line 17).....	54,052	86,844	32,792	32,117	41,810	9,693	16,967	28,523	11,555	5,068	7,342	2,274
B. U.S. exports associated with multinationals.....	13,736	21,228	7,492	10,734	17,450	6,716	387	1,335	948	2,033	2,839	806
1 By U.S. reporter to own majority-owned foreign affiliates (line 4).....	5,038	8,623	3,585	4,208	7,070	2,862	378	658	175	461	991	540
2 By other U.S. suppliers ³ to majority-owned foreign affiliates.....	1,002	1,288	286	780	908	128	157	191	34	83	107	29
3 By U.S. reporter to other foreigners (line 5) ²	7,697	11,317	3,720	5,746	9,372	3,626	429	685	172	1,495	1,738	243
C. U.S. imports associated with multinationals.....	5,485	11,589	6,104	3,787	8,383	4,596	2,067	3,274	1,207	721	942	221
1 By U.S. reporter from own majority-owned foreign affiliates (line 18).....	3,493	6,244	2,751	2,181	4,183	1,992	1,074	1,976	902	198	115	-83
2 By other U.S. residents from majority-owned foreign affiliates (line 20).....	822	1,279	457	425	635	210	296	399	97	101	225	154
3 By U.S. reporter from other foreigners.....	4,180	6,066	1,907	3,121	4,605	1,484	637	995	358	422	576	154

1. Data on consolidated sales are drawn from the gross sales data in table 3; see notes to table 2.

2. Line A5 in table 1 and line 5 in table 3 are slightly smaller than line B3 in table 1 because the latter includes U.S. exports (\$19 million in 1970) sold by U.S. suppliers other than the U.S. reporter and charged to majority-owned foreign affiliates, but shipped to other foreigners. Such exports are not a sale by the U.S. reporter, and therefore are excluded from line A5 above

and line 5 in table 3. Such exports are associated with multinational activities and are included for convenience in line B3.

3. Other U.S. suppliers can include U.S. reporters which have transactions with majority-owned foreign affiliates of other U.S. reporters in this sample.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Table 2.—Percent Distribution of Consolidated MNC Sales and Foreign Trade Between U.S. and Foreign Markets, for 1966 and 1970, by Industry of U.S. Reporter

Item 1 (line references to table 1)		[Percent]							
		All industries		Manufacturing		Petroleum		Other industries	
		1966	1970	1966	1970	1966	1970	1966	1970
1	Worldwide consolidated sales.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2	Sales to U.S. residents as percent of total (lines A1/A).....	78.5	74.7	80.3	78.8	68.1	81.6	84.8	84.0
3	Sales to foreigners as percent of total (lines A/A1).....	21.5	25.3	19.7	21.2	31.9	18.4	15.2	16.0
4	Sales in U.S. market.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
5	Imports as percent of sales (lines C/A1).....	3.7	4.7	3.7	4.9	5.5	7.0	2.0	1.8
6	Other sales as percent of sales (lines (A1-C)/A1).....	96.3	95.3	96.3	95.1	94.5	93.0	98.0	98.2
7	Sales in foreign markets.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
8	Exports as percent of sales (lines B/A1).....	22.3	21.6	22.4	23.6	6.5	4.6	81.0	81.4
9	Other sales as percent of sales (lines (A1-B)/A1).....	77.8	78.4	77.6	76.4	93.5	95.4	18.0	18.6

1. Data for the percent computations are drawn from table 1; also see notes to table 1.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Some major findings

The sample of 298 MNCs had consolidated worldwide sales of \$388.6 billion in 1970. Three-fourths, or \$290.5 billion, of these sales were to unaffiliated U.S. residents (table 1); most of these sales were supplied out of U.S. production as the U.S. import content was estimated at less than 5 percent (table 2). Abroad, MNC consolidated sales to unaffiliated foreigners totaled \$98.1 billion, with a U.S. export content of 22 percent.

From 1966 to 1970, consolidated worldwide sales increased \$102 billion, a compound annual growth rate of 7.9 percent. The growth in sales to U.S. residents was much slower than the growth in sales to foreigners, in part because the United States moved into an economic recession over the period, while business conditions abroad generally improved.

The U.S. import content (as a percentage) of consolidated MNC sales to

U.S. residents increased from 1966 to 1970, while the U.S. export content (as a percentage) of MNC sales to foreigners slipped slightly. Some of the increase in the U.S. import content reflected the increased U.S. demand for petroleum (and the resulting liberalization of U.S. oil import quotas), and the 1965 U.S. Canada Automotive Trade Agreement, which resulted in substantial increases in U.S. imports (as well as in U.S. exports) of automotive products. The decreased U.S. export content in MNC sales to unaffiliated foreigners mainly reflected a rapid growth in sales to foreigners by foreign producing affiliates of the petroleum multinationals. Both for MNCs in manufacturing, helped by increased automotive exports to Canada, and for MNCs in the other industries category, the U.S. export content share in MNC sales to foreigners remained about the same, as these exports increased almost in line with the rapid growth in non-petroleum MNC sales to foreigners.

their consolidated worldwide sales were to foreigners, slightly less than the percent for all industries. For petroleum MNCs, on the other hand, over 38 percent of their sales were to foreigners, reflecting the role of the U.S. international oil companies as suppliers of foreign-produced oil to foreign markets.

Growth in worldwide sales

From 1966 to 1970, consolidated worldwide sales by the sample increased \$102.0 billion, of which \$65.6 billion were to U.S. residents (lines A and A1). Taking U.S. and foreign markets together, the compound growth rate in sales was 7.9 percent per year. The growth in sales to U.S. residents was slow (6.4 percent per year) compared with the growth in sales to foreigners (12.3 percent per year). The rate and the pattern of growth in MNC sales were influenced by the course of business conditions in the United States relative to those abroad. In 1966, the United States was experiencing very strong aggregate demand while business conditions abroad generally were weak; by 1970, the U.S. economy was moving into recession, while foreign economic conditions strengthened.

The industry composition of growth in consolidated worldwide sales was divergent. For manufacturing MNCs, the increase was 7.0 percent per year, slightly below the average for all industries. For petroleum MNCs, however, the increase was 10.2 percent per year, reflecting the exceptionally rapid growth in European demands for energy from petroleum, as well as the fact that

Consolidated Multinational Sales

TABLE 1 shows worldwide consolidated MNC sales, sales in the United States and abroad, and the trade content of such sales organized by industry of the U.S. parent reporter. Chart 20 shows a flow diagram to clarify the relations between the various components of sales and trade given in

table 1. Manufacturing MNCs' sales in 1970 were \$252.4 billion, about 65 percent of the worldwide total. Sales by petroleum MNCs were \$76.1 billion, and sales by MNCs in the other industries category (mainly mining and trade) were \$60.1 billion. For manufacturing MNCs, about 24 percent of

a higher proportion of petroleum MNCs' sales were concentrated in sales abroad, compared with the two other industry groups.

U.S. import content in domestic MNC sales

The U.S. import content in MNC consolidated sales to U.S. residents is defined as consisting of all imports by unaffiliated U.S. residents purchased directly from the MOFAs, plus imports by U.S. reporters from affiliated or unaffiliated foreigners. On the basis of this definition, in 1970 the U.S. import content in MNC consolidated sales to U.S. residents amounted to \$13.6 billion (line C). Imports by unaffiliated U.S. residents directly from the MOFAs were \$1.3 billion (line A3 or line C2), and imports by the U.S. reporters were \$12.3 billion, half of which were from their own MOFAs (line C1), and half of which were purchased from other foreigners (line C3).

The definition of U.S. import content treats all of the \$13.6 billion as in some sense "embodied" in sales to unaffiliated U.S. customers. For the \$12.3 billion of imports by the U.S. reporters, some imports were sold with and some without further processing or assembly; the value of imports of capital goods and raw materials consumed in the process of production can be considered to be embodied in the value of sales by the reporters to unaffiliated customers.

On this basis, the MNCs' 1970 sales to unaffiliated U.S. residents of \$290.5 billion (line A1) contained \$13.6 billion of direct U.S. imports and \$276.9 billion of goods largely produced in the United States, including both the value added by the reporters and the goods they purchased from other U.S. producers. Using these estimates, the U.S. import content in MNC sales to U.S. residents was 4.7 percent in 1970, while the share of U.S.-source production in MNC sales to U.S. residents was 95.3 percent (table 2, lines 5 and 6). For manufacturing, the U.S. import content in MNC sales to U.S. residents was 4.9 percent; for petroleum 7.0 percent; and for other industries, 1.8 percent.

Use of this import content calculation as an indication of the share of foreign and U.S. production in MNC sales to U.S. residents is, however, subject to a number of qualifications. The share of foreign production in sales to U.S. residents would tend to be overestimated because (i) some part of the imports of the U.S. reporter probably are embodied in goods the U.S. reporter sells to foreigners rather than to U.S. residents, and (ii) some of the identified U.S. imports by the U.S. reporter and other U.S. residents embody goods previously exported from the United States (U.S. trade with Canada in automotive products is an example). On the other hand, the share of foreign production would tend to be underestimated because the calculation makes no allowance for any imports contained in purchases made domestically from other U.S. suppliers by the U.S. reporters. In addition, there is a problem of timing, especially in the treatment of raw materials, imported capital goods, and inventories; thus the year of sale of a U.S. product may differ from the year in which the embodied goods were imported. Although there is no clear bias either way, these statistical problems indicate the need for caution in assuming that the import content calculation is always a good proxy for the share of foreign as opposed to U.S.-source production in MNC sales to U.S. residents.

From 1966 to 1970, the U.S. import content in MNC consolidated sales to U.S. residents increased twice as fast as the growth in other MNC consolidated sales to U.S. residents. Mirroring this, the U.S. import content increased from 3.7 percent of MNC consolidated sales to U.S. residents in 1966 to 4.7 percent in 1970 (table 2, line 5). For manufacturing, the U.S. import content increased from 3.7 percent to 4.9 percent; for petroleum, from 5.8 percent to 7.0 percent; for the other industries category, the U.S. import content decreased.

Over this period, the rise in the U.S. import content as a percentage of MNC consolidated sales to U.S. residents reflected several partly offsetting developments. Some of the rise reflected the impetus given to U.S. imports of

automotive products by the 1965 Canadian auto agreement, and the increases in U.S. oil import quotas as domestic energy requirements grew; these changes, taken together, probably accounted for nearly half of the increase in the U.S. import content as a percentage of MNC consolidated sales to U.S. residents. Also, there probably was some general deterioration in the competitiveness of U.S. production relative to foreign production during this period, which may have stimulated MNC-associated U.S. imports as well as other U.S. imports. On the other hand, the relatively slow economic growth and underutilization of capacity in the United States probably tended to moderate the growth in the import content share of MNC sales to U.S. residents.

U.S. export content in MNC sales to foreigners

The U.S. export content in MNC sales to foreigners is defined as consisting of all exports to MOFAs by U.S. residents plus exports to other foreigners by U.S. reporters (table 1, line B).

On this basis, the U.S. export content in consolidated sales by the sample MNCs was \$21.2 billion for 1970. Exports to the foreign affiliates totaled \$9.8 billion (lines B1+B2), mainly from the parent U.S. reporter, and were embodied in the \$86.7 billion of sales to unaffiliated foreigners by the MOFAs (line A6). The balance of the \$21.2 billion was U.S. exports of \$11.4 billion sold by the U.S. reporters directly to unaffiliated foreigners (line B3).

MNCs' 1970 sales to unaffiliated foreigners of \$98.1 billion (line A4) consisted of \$21.2 billion of direct U.S. exports and \$76.9 billion of goods mainly produced abroad. Accordingly, the U.S. export content in MNC sales to foreigners was 21.6 percent, while the share of foreign-source production in MNC sales to foreign residents was 78.4 percent—including value added by the MOFAs and goods bought by them from other foreigners. For manufacturing, the U.S. export content was 28.5 percent, much larger than the U.S. import content in manufacturing MNC

consolidated sales to U.S. residents. For petroleum, the U.S. export content was 4.6 percent, and for the other industries category, 81.4 percent.

From 1966 to 1970, the U.S. export content in MNC consolidated sales to foreigners increased 11.5 percent per year, approaching the rapid growth in other MNC consolidated sales to unaffiliated foreigners. These U.S. exports thus shared substantially in the exceptional growth in the foreign markets of these MNCs, and the U.S. export content as a percent of MNC sales to foreigners slipped only slightly, from 22.2 percent in 1966 to 21.6 percent in 1970. The slippage reflected developments in the petroleum industry: the U.S. export content in petroleum sales decreased from 5.5 percent in 1966 to 4.6 percent in 1970, reflecting a sharp increase in

sales by MOFAs in oil producing areas to foreign consuming areas. For manufacturing, the U.S. export content was about 28.5 percent in both years. This stability in part reflected the impact of the Canadian auto agreement, which led to significant increases in U.S. exports (as well as in U.S. imports) of automotive products. For the group of industries other than manufacturing and petroleum the U.S. export content increased marginally.

The use of these calculations of U.S. export content as indicators of the share of U.S. and foreign production in MNC sales abroad is subject to the same type of qualifications and uncertainties as is the use of the calculations of U.S. import content in MNC sales in the United States.

the Survey. (See Technical Notes.)⁴

Table 3 gives detail on the composition of worldwide MOFA gross sales by industry of the parent U.S. reporter, and by residence of customer. Table 4 gives a percentage distribution of the data shown in table 3.

Gross worldwide sales by the 5,237 MOFAs covered in the sample were \$114.7 billion in 1970. Sales to foreigners were \$107.2 billion, or 93.4 percent of the gross total; exports to the United States were \$7.5 billion, and were mainly to the U.S. reporter.

For the sample, manufacturing accounted for the bulk of gross affiliate sales. MOFAs of manufacturing MNCs showed worldwide gross sales of \$62.9 billion in 1970. Their sales to foreigners were 54 percent of all MOFA gross sales to foreigners; and their sales to U.S. residents were 64 percent of all MOFA gross sales to U.S. residents. For petroleum, MOFA worldwide gross sales were \$43.7 billion, and for the other industries category, \$8.0 billion.

Table 3 distinguishes between gross sales to unaffiliated customers and gross

WHILE consolidated sales provided a useful instrument to analyze the operations of MNC companies as a whole, the activities of the component entities are also of interest and must necessarily be

analyzed on a gross sales basis. A brief review of gross sales by the MOFA's is given below. These figures are similar to, but not strictly comparable with the data on sales published previously in

Table 3.—Worldwide Gross Sales by 238 Multinational Companies, for 1966 and 1970, by Industry of U.S. Reporter

Item	All industries			Manufacturing			Petroleum			Other industries		
	1966	1970	Change, 1966-70	1966	1970	Change, 1966-70	1966	1970	Change, 1966-70	1966	1970	Change, 1966-70
Gross Sales ¹	207,993	423,368	115,867	292,144	278,231	67,966	61,399	61,429	36,189	43,789	61,641	17,812
By U.S. reporter	224,629	309,241	72,462	164,964	287,593	122,629	34,914	47,899	12,975	26,022	53,589	15,627
To unaffiliated U.S. residents	224,120	289,232	65,112	154,029	191,954	37,925	34,915	45,942	11,027	26,077	50,837	14,769
To foreigners	12,719	20,009	7,290	9,975	19,129	9,154	799	1,146	349	1,945	2,752	777
To own majority-owned foreign affiliates	6,038	8,526	2,488	4,206	7,079	2,873	575	583	175	454	901	446
To others	7,081	11,385	4,304	5,769	12,050	6,281	224	563	339	1,491	1,751	260
By majority-owned foreign ² affiliates	71,154	114,119	42,965	38,351	42,928	4,577	25,438	48,749	23,311	5,767	2,042	2,275
Sales to foreigners	54,947	107,196	52,249	36,213	40,139	3,926	25,067	41,879	16,812	5,427	7,677	2,250
Local sales	82,490	80,827	2,663	28,148	44,817	16,669	15,473	26,356	10,883	5,957	5,744	1,787
Exports to third countries	15,247	26,939	11,692	6,278	11,222	4,944	6,534	12,112	5,578	1,440	1,923	483
Exports to United States	4,268	7,024	2,756	2,595	4,798	2,203	1,970	2,393	423	299	265	67
By majority-owned foreign affiliates to unaffiliated customers	16,928	26,065	9,137	6,507	11,462	4,955	2,164	14,742	12,578	657	492	-65
Sales to unaffiliated foreigners	12,695	20,482	7,787	4,140	7,909	3,769	5,590	12,738	7,148	338	377	15
Local sales	4,006	5,799	1,793	284	1,140	856	3,186	4,085	899	23	168	91
Exports to third countries	3,699	14,693	11,094	3,285	6,169	2,884	4,390	8,210	3,820	337	274	-63
Exports to parent U.S. reporter	2,439	6,244	3,805	2,161	4,133	1,972	1,974	1,975	0	196	115	-83
By majority-owned foreign affiliates to unaffiliated customers	54,874	68,928	14,054	31,492	31,465	18,973	17,313	20,006	2,693	5,180	7,662	2,482
Sales to unaffiliated foreigners	44,032	59,744	15,712	25,067	40,830	15,763	15,817	23,813	8,000	5,068	7,880	2,812
Local sales	48,294	75,025	26,731	25,067	48,877	23,810	15,573	23,710	8,137	3,986	5,641	1,655
Exports to third countries	6,556	11,710	5,154	3,011	5,153	2,142	1,944	4,905	2,961	1,103	1,869	766
Exports to unaffiliated U.S. residents	822	1,579	757	425	890	465	298	386	87	101	282	181

1. Sales by U.S. reporter (lines 1 through 5) were reported on a partially consolidated basis, in that domestic intercompany sales were netted out; therefore line 1 contains sales to unaffiliated U.S. residents and all sales to foreigners by the consolidated U.S. reporter.

2. Total sales by the foreign affiliates (line 6) include sales of finance and insurance affiliates but since such affiliates were not required to give any breakdowns of sales by destination in

1966, lines 7 through 20 in 1966 exclude such sales. The amount involved was \$249 million.

Note.—All data in table 3 are drawn from Bureau of Economic Analysis, Special Survey of U.S. Multinational Companies, 1970.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Table 4.—Percent Distribution of Gross Sales by Majority-Owned Foreign Affiliates of 298 Multinational Companies, for 1966 and 1970, by Industry of U.S. Reporter

Item ¹	(Percent)							
	All industries		Manufacturing		Petroleum		Other industries	
	1966	1970	1966	1970	1966	1970	1966	1970
1 Gross sales (line 6).....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2 Sales to foreigners (line 7).....	23.7	23.4	22.9	22.4	24.6	24.5	24.1	23.5
3 Local sales.....	76.3	76.6	77.1	77.6	75.4	75.5	75.9	76.5
4 Exports to third countries.....	20.0	23.0	15.1	18.0	24.7	20.0	25.0	24.0
5 Exports to United States (line 10).....	3.9	6.5	6.7	7.6	5.2	6.4	6.2	4.8
6 Sales to affiliated customers (line 11).....	22.5	23.3	16.2	18.2	24.7	23.7	9.7	6.1
7 Sales to foreigners (line 12).....	17.7	17.8	10.6	11.6	20.8	20.3	8.2	4.7
8 Local sales.....	5.6	5.0	2.3	1.8	11.7	10.4	4.4	1.8
9 Exports to third countries.....	12.1	12.8	6.4	9.8	18.9	18.3	6.8	2.4
10 Exports to United States (line 16).....	4.8	5.4	5.6	6.6	4.1	4.5	3.4	1.4
11 Sales to unaffiliated customers (line 15).....	77.2	76.7	83.4	81.8	75.3	76.3	90.3	93.9
12 Sales to foreigners (line 17).....	73.0	73.6	72.5	70.2	54.0	53.4	87.9	90.9
13 Local sales.....	26.0	26.4	27.6	29.8	45.2	46.6	12.1	9.1
14 Exports to third countries.....	5.0	18.2	7.7	8.3	11.3	19.1	20.6	20.6
15 Exports to United States (line 20).....	1.2	1.1	1.1	1.0	1.1	1.9	1.8	3.1

1. Percent distributions are based upon data in table 2; note that for 1966 lines 2 and 5 exclude sales of finance and insurance affiliates, but line 1 includes such sales, so that lines 2-5 do not sum to 100 percent. See notes to table 2.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

sales to affiliates (which cover sales to the U.S. parent and sales to other MOFAs of the U.S. parent). Sales to affiliated customers were \$26.7 billion in 1970, 23 percent of the total; sales were predominantly exports, either to other foreigners or to the United States. In contrast, sales to unaffiliated customers were predominantly to local customers in the principal country of operation of the MOFA; this contrast held for all three industry groups.

From 1966 to 1970, worldwide gross sales by the MOFAs increased \$43.6 billion, a compound annual growth rate of 12.7 percent. Their gross sales to all foreigners increased \$40.5 billion, and their exports to the United States increased \$3.3 billion.

As table 4 indicates, the substantial growth in gross MOFA sales from 1966 to 1970 was accompanied by only small shifts in the structure of sales, both overall and by industry. Gross sales to foreigners became slightly less important and those to the United States slightly more important. Within sales to foreigners, the most noticeable shift was a reduction in the importance of local sales and an increase in exports to third countries, reflecting activities of petroleum MNCs and, to a lesser extent, manufacturing MNCs. Sales to affiliated customers became slightly more important and those to unaffiliated customers slightly less so.

Technical Notes

Gross sales

The gross sales data shown for a U.S. reporter (a collective term for all the U.S. components of a MNC, including, for example, any domestic affiliates of the company actually filling out the report) are not strictly comparable with those shown for its MOFAs. The U.S. reporter (parent) data, as received by BEA, cover

only sales to unaffiliated U.S. residents; sales between different U.S. members of the same MNC are excluded. In contrast, sales transactions between MOFAs belonging to the same MNC were often reported separately even if the MOFAs were domiciled in the same country. MOFAs could be consolidated in one report only if the MOFAs were in the same country and

in the same industry and even that much consolidation was not always done. Therefore gross sales by the U.S. reporters are more consolidated than are gross sales by the MOFAs. This difference in consolidation partly explains why U.S. reporter sales to affiliated customers were less than 3 percent of their gross sales (table 3, lines 4 and 1), while MOFA sales to affiliated customers were 23 percent of their gross sales (lines 11 and 6).

The gross sales data for foreign affiliates discussed above differ in important respects from data published previously in the SURVEY. Affiliate data in the present article are classified by industry of the parent U.S. reporter; data published previously were classified by industry of the foreign affiliate. In addition, data in this article cover the MOFAs of 298 MNCs in three industry groups—manufacturing, petroleum, and all other industries (including trade and mining). The previously published data were estimates of total sales by all foreign manufacturing and mining affiliates in which U.S. owners had a direct equity interest of 25 percent or more.

Under the definitions given earlier, consolidated sales by the U.S. reporter include sales to its own minority-owned foreign affiliates; for purposes of this article, minority-owned affiliates are considered unaffiliated foreigners. On the other hand, consolidated sales by the MOFAs do not include their sales to related minority-owned foreign affiliates. This difference in the treatment of sales to minority-owned affiliates reflects the fact that data as reported to BEA did not separate MOFA sales to minority-owned foreign affiliates from MOFA sales to other MOFAs, while sales by U.S. companies to minority-owned foreign affiliates were not distinguished from sales to unaffiliated foreigners. The result gives a low measure of consolidated sales by the MOFAs relative to consolidated sales by the U.S. reporter.

Consolidation not only eliminates double counting of the value of sales by each MNC; in addition, since the gross sales data for the U.S. reporter and for its affiliates were collected at different levels of aggregation, consolidation is

useful because it puts available data on sales by the U.S. reporters and sales by affiliates of the same MNC on the same basis. Furthermore, consolidation minimizes problems of valuation of transactions between affiliated companies: pricing of sales between members of a MNC may vary from open market prices; because consolidation eliminates transactions between affiliated companies, the effect of this intercompany pricing is substantially eliminated in the overall consolidated sales figures.

Consolidation eliminated double counting in the reported gross sales figures of \$35.3 billion for 1970 (the difference between table 3, line 1 and table 1, line A). The items eliminated were U.S. parents' export and import transactions with their MOFAs (table 1, lines B1 and C1) and sales by MOFAs to other foreign affiliates of the same U.S. parent (table 3, line 12). The \$35.3 billion was 9 percent of consolidated sales in 1970, compared with 7 percent in 1966. For petroleum reporters, the amount of consolidation was \$15.3 billion in 1970, 20 percent of their consolidated sales.

Coverage and valuation of sales

Sales data in this article cover both goods and services, except for certain categories of U.S. trade described below which include only goods. Sales were requested to be reported excluding receipts for sales taxes or consumption taxes levied directly on the consumer. However, if the accounts of the company ordinarily showed sales inclusive of sales or excise taxes, sales could be reported on that basis. Sales are net of the value of goods returned, but include value-added or similar taxes collected at the wholesale level; however, the treatment of rebates of value-added taxes on MOFA export sales is not known.

MNC-associated trade

MNC-associated trade is defined to consist of three components:

1. *Trade between U.S. reporters and their MOFAs.* This category consists of U.S. reporters' exports of goods (but not services) to the MOFAs, whether the goods were actually produced by the U.S. reporters or by other U.S.

residents, and of imports by U.S. reporters from their own MOFAs. The latter, which are derived from affiliate sales data, include both goods and services; the service component is believed to be quite small.

2. *Trade between other U.S. residents and the U.S. reporters' MOFAs.* This category consists primarily of transactions between U.S. residents that were not in the sample and the MOFAs of the U.S. reporters; however, it also includes transactions between one U.S. reporter and the MOFAs of another U.S. reporter; such transactions could not be separately identified in the Survey data. U.S. exports include only goods. U.S. exports charged to the reporters' MOFAs on the books of other U.S. suppliers, but which were shipped to other foreign residents, are included in the component of MNC trade described below. Imports by other U.S. residents from MOFAs are derived from MOFA sales data and include what is believed to be a small amount of services.

3. *Trade between U.S. reporters and other foreigners.* This category consists of the U.S. reporters' export and import transactions in goods with foreigners other than their own MOFAs, but it includes a small amount of trade of U.S. reporters with MOFAs of other U.S. reporters, duplicating some of the data included in component 2, described above.

General sources

All 1970 data on sales and on the U.S. imports and exports associated with the 298 MNCs in the sample were obtained from Forms BE-11A and 11-B, "Confidential Special Survey of Multinational Companies, 1970," of the Bureau of Economic Analysis, response to which was voluntary.

Data on the U.S. reporters' sales and data on the U.S. reporters' imports from unaffiliated foreigners in 1966 were also obtained from the special survey. However, 1966 data on sales by the MOFAs, 1966 data on other MNC-associated imports, and all 1966 data on MNC-associated exports were based upon the mandatory benchmark survey of U.S. direct investments abroad for

that year.⁵ The data from the 1966 benchmark survey are for the same group of enterprises that were included in the 1970 special survey, but are as reported by them in the benchmark survey.⁶

Sample relative to MNC universe

Foreign affiliates: Gross sales of all nonfinancial MOFAs covered in the benchmark survey in 1966 were \$97.6 billion. Sales by MOFAs in the sample were \$71.2 billion in 1966, about 73.0 percent of the total. These figures are not strictly comparable. The 1966 universe data were compiled on a U.S.-national definition for majority ownership, i.e., taking into account the ownership interests of all U.S. residents; the sample data for 1966 were compiled on a single owner definition for majority ownership. Also, the sample in this report consists primarily of large U.S. MNCs; to obtain comparable estimates of the 1970 universe, information on the growth rates of sales by MOFAs of the smaller MNCs is required, as the growth in such sales may be different from that of the larger companies. Such information is not available.

U.S. reporters: Domestic sales data on the universe of U.S. reporters were not collected for either 1966 or 1970. However, data on assets are available for the universe in 1966 and can be used as a measure of relative importance of the sample of 298 companies. Domestic assets are defined to include financial claims on foreign residents other than foreign affiliates. The sample of 298 companies reported that their domestic assets in 1966 were \$227.7 billion; this amounted to 39.1 percent of domestic assets of \$582.8 billion for all U.S. reporters covered in the 1966 benchmark survey. Comparability of these asset figures is limited by statistical problems, including the effects of mergers and acquisitions.

5. *U.S. Direct Investments Abroad, 1966. Part II: Investment Position, Financial and Operating Data.* This survey was published in three volumes (Group 1, covering U.S. reporters in petroleum; Group 2, covering U.S. reporters in manufacturing; and Group 3, covering U.S. reporters in other industries) as supplements to the SURVEY, available from the National Technical Information Service, U.S. Department of Commerce, Springfield, Va. 22161, at \$5 for each of the three volumes. Accession numbers are COM-72-10097, 72-10098, and 72-10441, respectively.

6. See Bureau of Economic Analysis, *Special Survey of U.S. Multinational Companies, 1970*, for a more detailed explanation of how this enterprise match was done.